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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,544

09/01/2006

Jean-Claude Bini

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

DONADO, FRANK E

ART UNIT

PAPER NUMBER

4173

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,544	Applicant(s) BINI ET AL.	
	Examiner FRANK DONADO	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being unpatentable over Rosner, et al. (U.S. Patent No. 7,149,213), referred to herein as Rosner.

Regarding claims 1 and 6-8, Rosner teaches a radio telecommunication apparatus incorporating a baseband processor for transmitting commands to a tunable radio-frequency subsystem, said radio-frequency subsystem being designed to convert radio signals into baseband signals and vice-versa, for tuning said radio-frequency subsystem in synchronism with the processing of one signal frame, said baseband processor comprising: a memory (Fig. 2, 36) to store a list of events wherein each

event ("SCHEDULER" 50) of said list is associated with an absolute event time field indicating at which time from the beginning of the frame processing the event should be executed, an interface with the radio-frequency subsystem, designed to execute each event of said list of events in order to transmit to the radio-frequency subsystem the corresponding command, each event being executed during the frame processing at a time corresponding to the value of the associated absolute event time field, and a calculator to compute and store said list of events in the memory, wherein the baseband processor further comprises a storage unit storing a descriptor table (Fig. 5, 61) comprising for each descriptor a pointer field (Fig. 5, 62) to point to a definition of an operation to be carried out by said interface during the frame processing and an absolute operation time field indicating at which time from the beginning of the frame processing the corresponding operation should be carried out by said interface, an operation definition table comprising for each operation a definition of the operation, each definition having a sequence of events to be executed by the interface in order to carry out said operation (Fig. 3), each event of the definition table is associated with a relative event time field indicating at which time from the beginning of the operation the corresponding event should be executed, and wherein said calculator is designed to automatically compute said list of events from the description and operation tables (it should be noted that Rosner teaches a system that uses event tables to define commands to be executed during processing of a signal frame, data is preloaded into a WLAN module and RAM before initiating the transmission of a signal frame and a linked-list ensures that frame information is ready for the next transmission, thereby

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allowing storage space to be saved, a signal is transmitted to a baseband processor after the pre-loading of data/events related to the processing of the signal frame, a baseband processor and radio frequency broadband front end transmit and process signals between each other, a memory stores the frame processing information in a station table, a scheduler schedules when each signal will be processed in the processing a signal frame, status information is used by both a scheduler and a prioritizer to decide/prioritize when signal transmissions will take place, a calculator is used to compute and store list of events, a set of descriptors that are stored in a table and contain a pointer that points to the starting address in system memory of the next software queue element of the complete software frame queue) [Column 1, lines 63-66, Column 2, lines 25-36, Column 3, lines 8-10 and 40-46, Column 8, lines 59-61, Column 9, lines 37-39, Column 10, lines 32-37, Column 12, lines 46-52 and 60-66, Column 13, lines 23-26,].

Regarding claim 2, Rosner teaches the limitations of claim 1, wherein the storage unit further comprises a data table having parameter values, at least one definition of the operation definition table has an event associated with an unknown parameter value, each descriptor which comprises a pointer field pointing to an operation definition, definition of which comprises an event associated with an unknown parameter value is associated with a parameter value of the data table, and the calculator replaces the unknown parameter value in a definition with the parameter value associated with the descriptor comprising a pointer field pointing to this definition,

in order to compute said list of events (it should be noted a parameter value called a software queue element has a 0 value initially stored in a frame pointer to indicate it is the last software queue element for the current transaction as well as a parameter in the software queue element called a build valid flag (the build valid flag parameter indicates when information is ready for transmission) has a 0 value initially stored to indicate no information is yet available for the transmission, all software queue elements are built and the build valid flag parameter value is now replaced by a known value indicating information is ready for transmission after all elements of the software queue are built and stored for the amount of transmission data, transmission rates and header lengths are pre-calculated prior to initiating the transmission) [Column 13, lines 7-14, Column 15, lines 16-24, 29-31 and 47-54].

Regarding claim 3, Rosner teaches the limitations of claim 1, wherein the memory comprises a non-dedicated random access memory which is connected to the calculator and to the interface through a shared memory access bus wherein the calculator stores the list of events in said memory using the shared memory access bus, and the interface reads the list of events in said memory using the shared memory access bus (it is noted that RAM and ROM are included in the computer system, memory as well as a calculator used to calculate transmission rates and header lengths, a PCI bus through which a WLAN is interfaced with a host section that includes the host processor and system memory that stores transmission frame information) [Column 3,

lines 5-7, Column 5, lines 30-32, Column 13, 45-51, Column 15, lines 50-54 and Figure 2].

Regarding claim 4, Rosner teaches the limitations of claim 2, wherein the interface reads the list of events using direct memory access (DMA) technologies it should be noted that a DMA buffer is used to gain direct access to memory during frame transmission) [Column 8, lines 28-30 and 36-38 and Figure 2].

Regarding claim 5, Rosner teaches the limitations of claim 1, wherein the calculator comprises a main processor programmed to update the description table in the storage unit in order to tune the radio-frequency subsystem for the processing of the next frame, and a coprocessor associated with the main processor, the coprocessor being able to compute said list of events from the stored tables in the storage unit (it should be noted that a host processor is interfaced with system memory where transmission data is stored and updated through a linked-list and values of a build valid flag are updated with known values before processing of the next frame, and a baseband processor works with a frame composer to processes a signal frame, wherein the baseband processor processes the preamble part of each signal frame that come from the stored table information, the frame composer forms all of the transmission frames except for the preamble (which is processed by the baseband processor), and transmission rates are pre-calculated within said frame composer) [Column 5, lines 23-

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26, Column 9, lines 14-18, Column 12, lines 60-66, Column 15, lines 46-53, Column 16, lines 15-20].

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Woods, et al (US 6,748,451), discloses using radio frequency to facilitate communication amongst computer nodes through the execution of logic in a coordinated manner.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK DONADO whose telephone number is (571)270-5361. The examiner can normally be reached on Monday-Thursday, 7:30 am -5 pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frank Donado
Art Unit 4173

**/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 4173**